ABSTRACT OF THE DISCLOSURE

A color image of a circuit board is divided into respective color regions. Plural representative colors are set, and angle indices and distance indices are calculated for each pixel color in the color image in a predetermined color

5   space.   The angle indices for a particular pixel color represent angles between an individual color vector representing the particular pixel color and plural representative color vectors of the plural representative colors. The distance indices for a particular pixel color represent distances between the particular pixel color and the plural representative colors.   Composite

10   distance indices are then calculated for each pixel color in the color image, based on the distance indices and the angle indices.   Each pixel in the color image is classified into plural representative color regions associated with the plural representative colors according to the composite distance indices, thereby dividing the image region of the color image into the plural

15   representative color regions.